

TIMBALIER

LOCATION: South western portion of Lafourche Parish. The EMU is open water with the exception of the Casse-Tete, the Calumet, and East Timbalier Islands. The EMU is bordered on the north by the Raccourci EMU, on the east by Fourchon EMU, on the south by the Gulf of Mexico and on the west by the Terrebonne Parish line.

SOILS: Soils in the eastern part of the EMU, Casse-Tete, Bull, Calumet Islands and Devils Islands are typical soils developed under salt marsh similar to salt marsh areas of Bay Champagne and Caminada. Exposed sand occur along the coastal Barrier Island Beach System. In this EMU, these soils occur on East Timbalier Island extending onto the barrier beach near Bay Marchand.

VEGETATION: Primarily salt marsh with its attendant salt tolerant vegetation. Some dunal vegetation is found on East Timbalier Island. Dunal vegetation includes baccharis, wax myrtle and rattle box. Calumet and Casse-Tete Islands were at one time almost completely covered with mangroves. For the most part, black mangroves have disappeared from the Barrier Islands. Pelicans are most successful in roosting in Black Mangroves.

SUBSIDENCE POTENTIAL IF DRAINED: All land areas in the EMU except East Timbalier Island have a high subsidence potential. Timbalier Island with mostly mineral soils and firm substrate, has little or no subsidence potential.

LAND LOSS POTENTIAL:

A. Shoreline Retreat: Retreat in this EMU is comparable to the other EMU's in the Late Lafourche Delta. Grand Terre has high erosion rates which are comparable to East Timbalier. Grand Terre between 1960-1972 has lost 18% of its acreage, or 118 acres/year.

B. Land Loss Potential Due to Channel Construction: High in the study unit.

TOPOGRAPHIC FEATURES: East Timbalier Island (337 acres) has a low barrier beach on the Gulf side. Maximum elevations are at, or slightly above, plus five (5) feet MSL. The rest of the study unit is either marsh, mangrove or open water.

FLOODING POTENTIAL: The entire study unit is flood prone and particularly susceptible to the actions of tidal storm surges.

IMPORTANT FARMLANDS: None.

USE OF LAND: Most of the study unit is open water. There are numerous oil well platforms and storage tanks on and near East Timbalier Island. Many pipelines lace the area. There are no roadways within the study unit. East Timbalier Island is a National Wildlife Refuge. The area is suited for wildlife habitat and recreation.

UNIQUE ECOLOGICAL FEATURES:

A. Geological Features:

1. Beach Ridge: Barrier Island complex along the coast including the Timbalier Islands.
2. Deep Migratory Tidal Pass: Little Pass, Timbalier. Such a pass is unique for their depth (50 to 100 feet) and volume of water movement. Ecologically, these passes provide important migratory links connecting the Gulf with estuaries. Nutrients, detritus, and sediment, as well as fish and shellfish species, migrate through the pass.

B. Botanical Features:

1. Submerged grass beds: Found on the Bay of East Timbalier Island and the northeastern shore of Timbalier Bay. These beds of marine grasses are very important to the ecology of the area. For the most part, the beds have disappeared due to dredging activities.
2. Black Mangrove Area: Calumet Island is an important seabird nesting area and is essentially natural. The island has three distinct habitat zones: black mangrove, sand beach and submergent grass beds.

C. Zoological Features:

1. Seabird/wading bird rookeries:

Devils Island Rookery Lat. 29° 09' N. 90° 16' W

RECREATIONAL POTENTIAL: Barrier Island beaches offer swimming and sunbathing and other outdoor recreation, for the most part, by boat only. East Timbalier Natural Wildlife Refuge occupies 337 acres on and near the island.

HYDROLOGIC RESOURCES: The unit contains little or no freshwater except for occasional lenses floating on salt water.

HISTORIC/CULTURAL/ARCHEOLOGICAL:

A. Historic Sites: East Timbalier Island is a National Wildlife Refuge; part of the Timbalier Barrier Island Chain.

B. Cultural: None.

C. Archeological Sites: None.

GOALS FOR TIMBALIER

1. Reduce or eliminate erosion of East Timbalier Island
2. Promote beach restoration and/or other means of Barrier Island rejuvenation

3. Protect important bird rookeries of Casse-Tete and Calumet Islands

POLICIES FOR TIMBALIER

This EMU contains some of the most fragile and important areas in the coastal zone. East Timbalier Island is part of the Barrier Island Complex that forms much of the coastal front in southeast Louisiana. The island functions as a storm buffer and habitat for birds. Calumet and Casse-Tete Island have large strands of mangrove utilized for bird rookeries.

POLICY 1. All General Policies for the Lafourche Coastal Zone shall apply in this EMU unless modified by specific EMU or sub EMU policies stated in this EMU policy statement.

POLICY 2. No channels shall be cut through any islands in this EMU for any purpose.

POLICY 3. Linear features involving dredging shall not traverse or adversely affect East Timbalier Island.

POLICY 4. Experimental beach nourishment, dune building, and revegetation projects as mitigation for any CZM permits issued in this area shall be encouraged.

POLICY 5. The rapid execution of the sand nourishment beach stabilization projects contemplated under the State Barrier Island Protection Program should be accomplished as soon as possible.

POLICY 6. No future permanent habitation for residential, commercial or industrial purposes should be allowed on East Timbalier, Casse-Tete, or Calumet Islands. Existing facilities should be allowed to remain until their activities have terminated. Temporary marine research facilities should be allowed as long as no permanent structures are built. Gulf Oil Company currently operates a major base on East Timbalier Island and should be allowed to remain at that location. Any expansion of that facility should not be detrimental to the island and should be approved by the CZM program.

POLICY 7. Any Barrier Island protection, enhancement, or stabilization project should have complete feasibility studies completed before undertaking such projects. In addition, project monitoring should be accomplished both by the project initiator and an independent monitor knowledgeable in marine biology, and/or coastal processes. The effects of the project after completion should also be monitored by the Coastal Management Section of the Department of Natural Resources to assess viability of various alternative strategies for protecting the barrier islands.

POLICY 8. Groins, jetties, and seawalls should be discouraged on East Timbalier unless it can be reasonably demonstrated that the construction of such structures will probably not adversely affect coastal deposition processes "down current" from these devices. Currently, Gulf Oil Company maintains such barriers on East Timbalier to stabilize the

erosion of the island. This attempt at erosion control should be encouraged to continue as long as it does not adversely affect the island.

POLICY 9. East Timbalier, Casse-Tete, and Calumet Island should be declared a state special area or part of a larger state special area encompassing the entire Barrier Island chain.

Besides these guidelines, all coastal use guidelines as stated in the F.E.I.S. of the Louisiana Coastal Zone Management Program shall apply to this EMU

Where EMU policies refer to a "use of state concern", the policies are intended only as recommendations to the state program managers and are not legally binding on the permit applicant or the state CZM program.